



Mini SMP (SMPM) Female VITA 67.3 Connector Solder
Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX

RF Connectors
Technical Data Sheet

PE49816

Configuration

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX
- VITA 67.3 Design

Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.4:1
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies
- VITA 67.3 Backplane
- High Density Applications

Description

Pasternack's PE49816 Mini SMP female VITA 67.3 connector with solder attachment for PE-P086, PE-P086HF, PE-P086LL, and PE-P086FLX is part of our full line of RF components available for same-day shipping. Our Mini SMP female VITA 67.3 connector operates up to a maximum frequency of 40 GHz and offers excellent VSWR of 1.4:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our Mini SMP female VITA 67.3 connector PE49816 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
VSWR			1.4:1	
Insertion Loss			0.8	dB
Impedance		50		Ohms

Mechanical Specifications

Size	
Length	0.59 in [14.99 mm]
Width	0.20 in [5.08 mm]
Height	0.20 in [5.08 mm]
Weight	0.00 lbs [0.86 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Female VITA 67.3 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX PE49816](#)



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RF Connectors Technical Data Sheet

PE49816

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Passivated Stainless Steel	

Mechanical Specification Notes:

500 mating cycles when mated with a Smooth Bore connector (100 when mated with a Full Detent connector)

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

Humidity

MIL-STD-202, Method 106, Less Step 7B

Shock

MIL-STD-202, Method 213, Condition I

Vibration

MIL-STD-202, Method 204, Condition D

Thermal Shock

MIL-STD-202, Method 107, Condition B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- PE49816 works with PE49822 Mini SMP VITA 67.3 10 Port Backplane Module C and PE49824 Mini SMP VITA 67.3 14 Port Backplane Module C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Female VITA 67.3 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX PE49816](#)



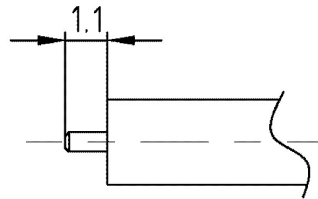
Mini SMP (SMPM) Female VITA 67.3 Connector Solder
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RF Connectors Technical Data Sheet

PE49816

Assembly Instruction

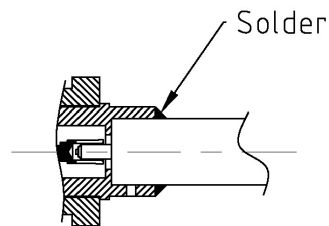
Cable Assembly Instructions



Trim insulator and outer conductor to dimensions shown.
Be careful not to nick the center conductor.

NOTE:

To minimize cable dielectric growth during soldering operation,
normalize cable thermal cycle per MIL-DTL-17 prior to final trim.



Insert cable into body, until outer conductor flush with body.
Solder outer conductor to body

NOTE:

For PE49816 and PE49820

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RF Connectors
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PE49816

Mini SMP (SMPM) Female VITA 67.3 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

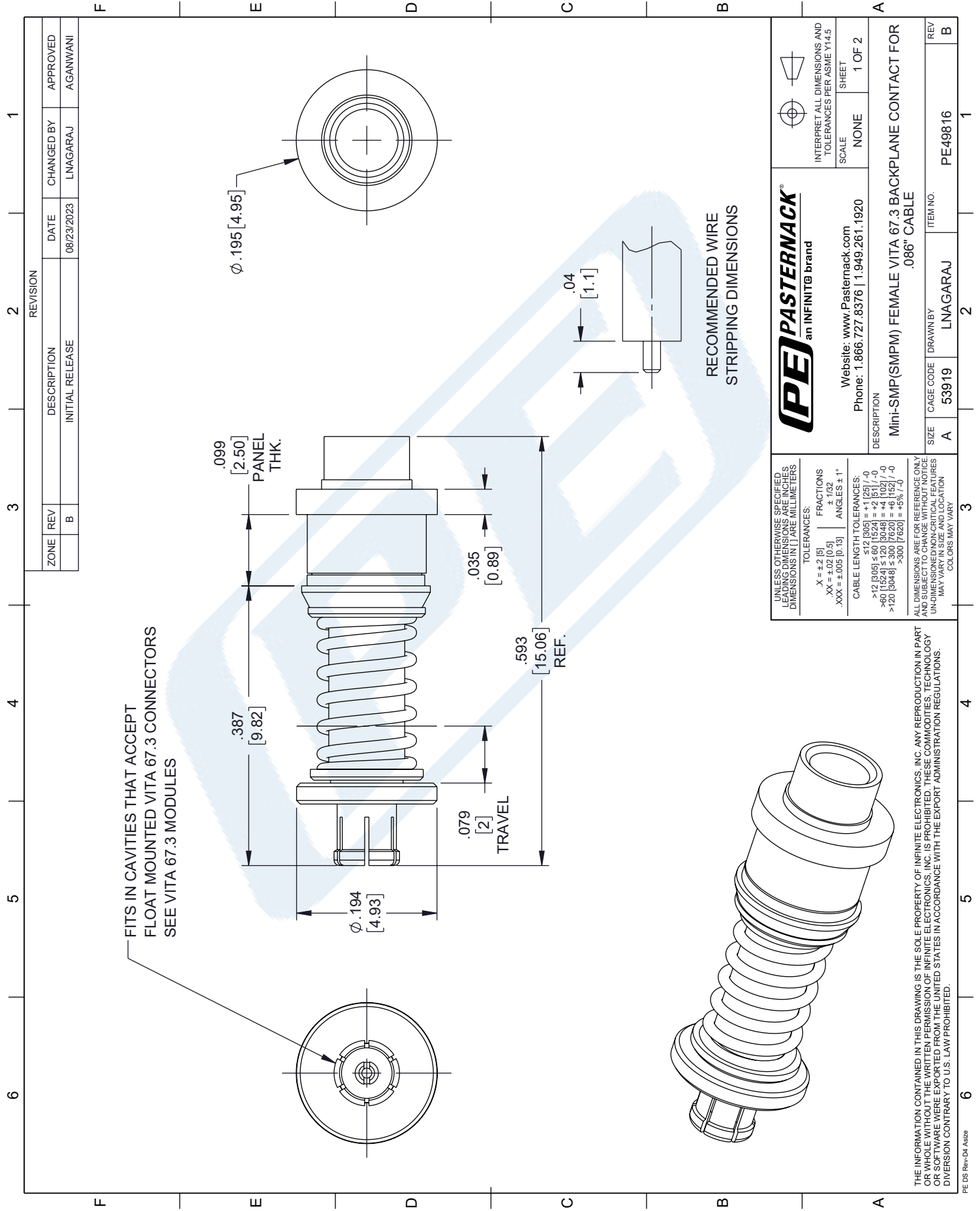
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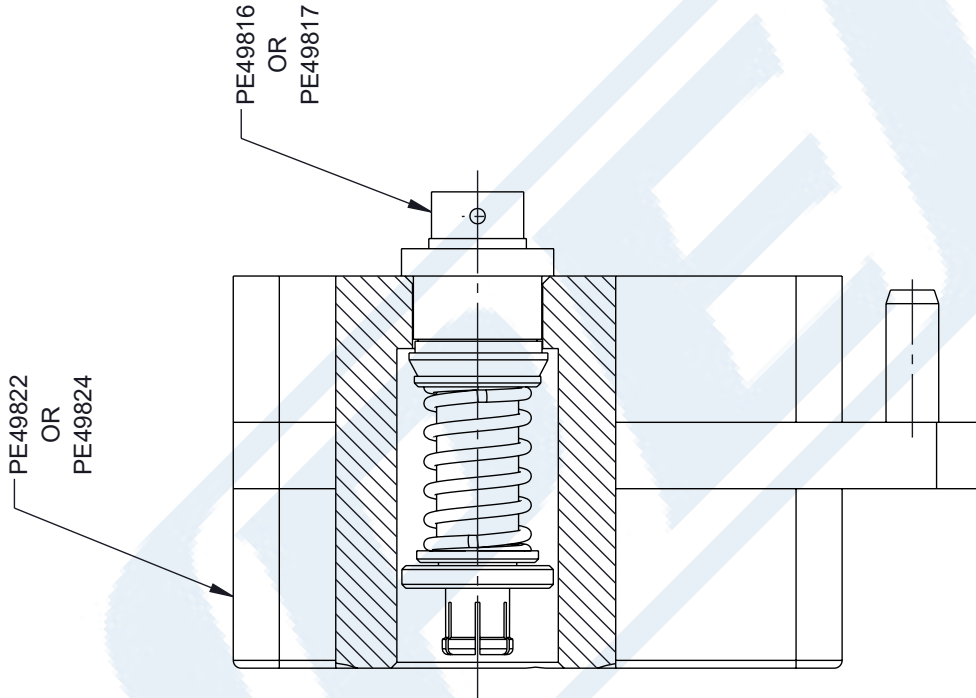
PE49816 CAD Drawing

Mini SMP (SMPM) Female VITA 67.3 Connector Solder Attachment
for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX



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DESCRIPTION		SCALE NONE	SHEET 2 OF 2						
Mini-SMP(SMPM) FEMALE VITA 67.3 BACKPLANE CONTACT FOR .086" CABLE									
SIZE A	CAGE CODE 53919	DRAWN BY LNAGARAJ	ITEM NO. PE49816	REV B		1			

ALL DIMENSIONS ARE FOR REFERENCE ONLY
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UNDIMENSIONED CRITICAL FEATURES
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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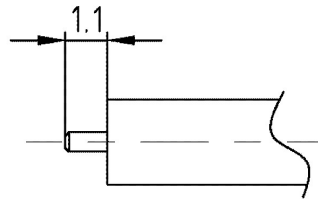
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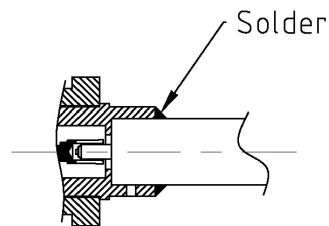
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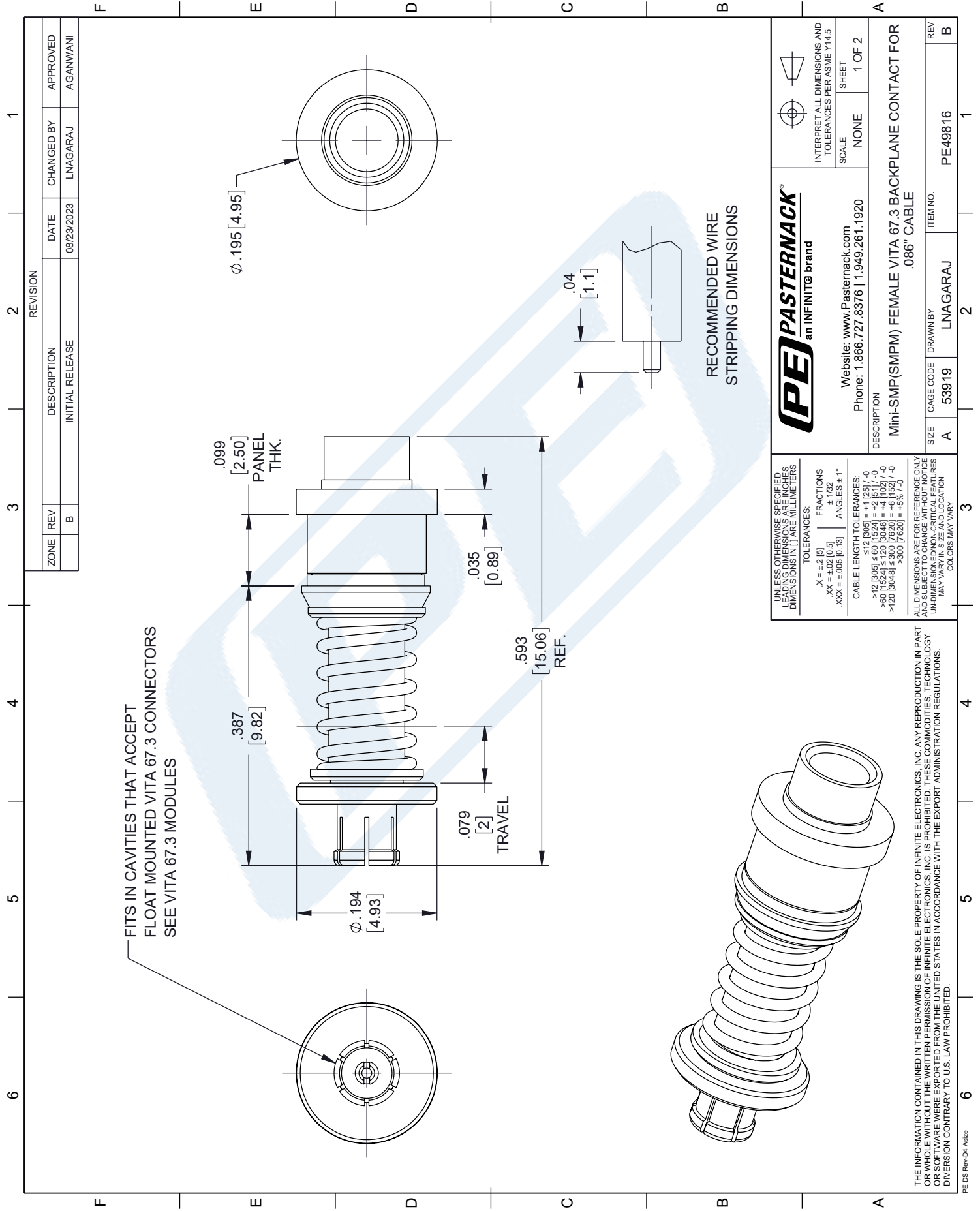
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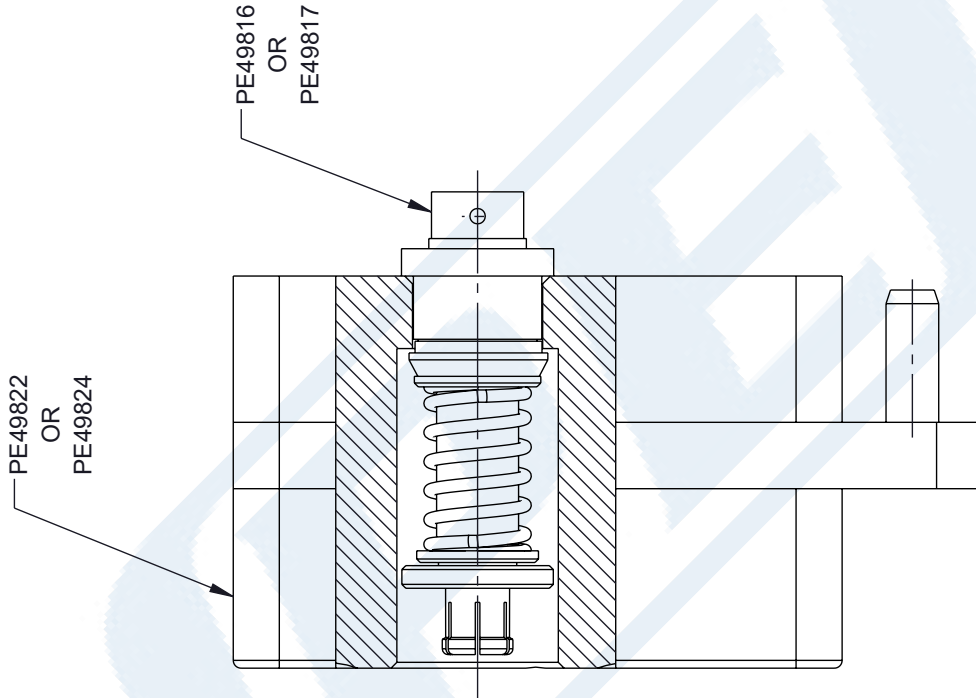
PE49816 CAD Drawing

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for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX



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DESCRIPTION		SCALE		SHEET	
Mini-SMP(SMPM) FEMALE VITA 67.3 BACKPLANE CONTACT FOR .086" CABLE		NONE		2 OF 2	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	
A	53919	LNAGARAJ	PE49816	B	

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Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Configuration

- Flexible Cable
- 2 Shield(s)

Description

Pasternack's PE-P086HF is a flexible, high frequency coaxial cable that provides similar loss characteristics to semi-rigid cable and low VSWR of 1.3:1 maximum up to 40 GHz. The low loss coax cable features silver-plated conductors and dual shields to maintain a shielding effectiveness of 110 dB. The size of the conductors for this low VSWR coax was specifically chosen to allow termination with standard connectors designed for M17/133-RG405 and other M17/133 cables. The outer shield is coated with a tough, chemical and heat resistant jacket. This PE-P086HF flexible low loss coaxial cable is a great choice for short length, high frequency system hook-up or jumper cable applications. The Pasternack coax cable can also be used as a replacement option for bent semi-rigid cable assemblies when length and routing are considered.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50 $\pm$ 2		Ohms
Velocity of Propagation		70		%
Nominal Capacitance		29.4 [96.46]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket PE-P086HF](#)

Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.4	1	2	2.4	3	GHz
Attenuation, Max	13.1	21.1	30.5	33.7	38	dB/100ft
	42.98	69.23	100.07	110.56	124.67	dB/100m
Attenuation, Typ	11.9	19.2	27.7	30.6	34.5	dB/100ft
	39.04	62.99	90.88	100.39	113.19	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	5	10	18	40		GHz
Attenuation, Max	50.3	74.3	104.6	170.3		dB/100ft
	165.03	243.77	343.18	558.73		dB/100m
Attenuation, Typ	45.7	67.5	95.1	154.8		dB/100ft
	149.93	221.46	312.01	507.87		dB/100m

Mechanical Specifications

Diameter	0.104 in [2.64 mm]
Weight	0.013 lbs/ft [0.02 Kg/m]
Min. Bend Radius (Installation)	0.52 in [13.21 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 1 Strands	0.02 in [0.51 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.064 in [1.63 mm]
First Shield	Silver Plated Copper Tape	
Second Shield	Silver Plated Copper Braid	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket PE-P086HF](#)

Flexible PE-P086HF Coax Cable Double
Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Jacket	FEP, Blue	0.104 in [2.64 mm]
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Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

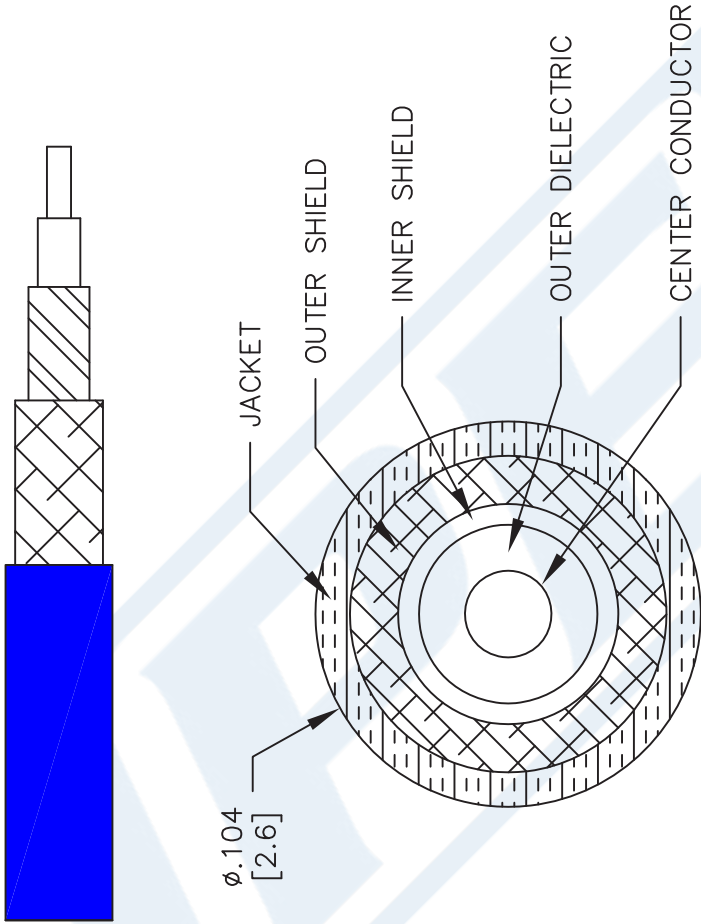
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URL: <https://www.pasternack.com/50-ohm-flexible-invalid-alias-fep-jacket-silver-plated-copper-tape-over-silver-plated-copper-braid-outer-conductor-double-shielded-blue-pe-p086hf-p.aspx>

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PE-P086HF CAD Drawing

Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket



NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
PE-P086HF

CAGE CODE 53919

CAD FILE 041317

SCALE N/A

SIZE A

2233

PE PASTERNAK
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com